

ABSTRAK

EFEKTIVITAS MODEL *DISCOVERY LEARNING* BERBANTUAN VISUALISASI MOLEKUL 3D PADA MATERI TEORI VSEPR DAN DOMAIN ELEKTRON UNTUK MENINGKATKAN KETERAMPILAN MENGOMUNIKASIKAN

Oleh

QORINA NURAZIZA

Penelitian ini bertujuan untuk mendeskripsikan efektivitas model *discovery learning* berbantuan visualisasi molekul 3D pada materi teori VSEPR dan domain elektron untuk meningkatkan keterampilan mengomunikasikan. Metode penelitian yang digunakan yaitu kuasi eksperimen dengan desain penelitian *the matching only pretest and posttest control group design*. Populasi dalam penelitian ini adalah seluruh peserta didik kelas XI IPA SMA Negeri 2 Metro dan sampel penelitian yang digunakan yaitu kelas XI 1 sebagai kelas eksperimen dan XI 3 sebagai kelas kontrol. Instrumen yang digunakan yaitu soal pretes dan postes yang terdiri dari 5 soal uraian untuk mengukur keterampilan mengomunikasikan, lembar observasi aktivitas peserta didik, dan lembar keterlaksanaan model *discovery learning*. Hasil penelitian menunjukkan bahwa rata-rata *n-gain* keterampilan mengomunikasikan peserta didik di kelas eksperimen yaitu 0,72 secara signifikan lebih tinggi daripada rata-rata *n-gain* keterampilan mengomunikasikan di kelas kontrol yaitu 0,53. Berdasarkan hasil penelitian maka dapat disimpulkan bahwa model *discovery learning* berbantuan visualisasi molekul 3D pada materi teori VSEPR dan domain elektron efektif meningkatkan keterampilan mengomunikasikan peserta didik.

Kata kunci: *discovery learning*, keterampilan mengomunikasikan, teori VSEPR dan domain elektron, visualisasi molekul 3D

ABSTRACT

EFFECTIVENESS OF DISCOVERY LEARNING MODEL ASSISTED BY 3D MOLECULAR VISUALIZATION ON VSEPR THEORY AND ELECTRON DOMAIN MATERIALS TO IMPROVE COMMUNICATING SKILLS

By

QORINA NURAZIZA

This study aims to describe the effectiveness of the discovery learning model assisted by 3D molecular visualization on the material of VSEPR theory and electron domains to improve communication skills. The research method used was a quasi-experimental with the matching only pretest and posttest control group design. The population in this study were all students of class X1 IPA SMA Negeri 2 Metro and the research sample used was class X1 1 as the experimental class and XI 3 as the control class. The instruments used were pretest and posttest questions consisting of 5 descriptive questions to measure communication skills, student activity observation sheets, and discovery learning model implementation sheets. The results showed that the average n-gain of students communication skills in the experimental class, which was 0.72, was significantly higher than the average n-gain of communication skills in the control class, which was 0.53. Based on the research results, it can be concluded that the discovery learning model assisted by 3D molecular visualization on the VSEPR theory and electron domain material is effective in improving students communication skills.

Keywords: discovery learning, communication skills, VSEPR theory and electron domains, 3D molecular visualization